

R U R A L   D I S T R I C T   O F  
B A K E W E L L.

A N N U A L   R E P O R T.

of the

M E D I C A L   O F F I C E R   O F   H E A L T H.

Hugh G. Watson, M.B., Ch.B.

for the year

1 9 5 0.



1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

$$x' = A(x)y, \quad y' = B(x)y,$$

where  $A(x)$  and  $B(x)$  are matrices of order  $n$  and  $m$  respectively, and  $x$  and  $y$  are vectors of order  $n$  and  $m$  respectively.

2. The second part of the paper is devoted to a study of the problem of the existence of solutions of the system of equations

$$x' = A(x)y, \quad y' = B(x)y, \quad z' = C(x)y,$$

where  $A(x)$ ,  $B(x)$  and  $C(x)$  are matrices of order  $n$ ,  $m$  and  $k$  respectively, and  $x$ ,  $y$  and  $z$  are vectors of order  $n$ ,  $m$  and  $k$  respectively.

RURAL DISTRICT OF BAKEWELL.

Report of the Medical Officer of Health, H. G. Watson, M.B., Ch. B. - 1950.

To: -

The Chairman and Members of the Bakewell Rural District Council,

Mr. Chairman, Ladies and Gentlemen,

I present herewith my Annual Report as Medical Officer of Health on the sanitary circumstances and vital statistics affecting the Rural District of Bakewell for the year 1950.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area	...	...	...	...	...	...	...	...	82,437 acres.
Population - Estimated by the Registrar General (mid.-yr. 1950)	...	...	...	...	...	...	...	...	19,580
Population - Census, 1931	...	...	...	...	...	...	...	...	19,282
Population - Census, 1921	---	...	...	...	...	...	...	...	19,537
Rateable Value (April 1950)	...	...	...	...	...	...	...	...	£102,161
Product of Penny Rate (ascertained) yr. ending March 1950	...	...	...	...	...	...	...	...	£414-6-5 <sup>1</sup> / <sub>4</sub> d.

EXTRACTS FROM VITAL STATISTICS FOR THE YEAR.

<u>Births.</u>	Total	Male	Female.
<u>Live Births.</u>			
Legitimate	271	148	123
Illegitimate	16	9	7
	<hr/> 287	<hr/> 157	<hr/> 130

Birth Rate per 1,000 of the estimated population - 14 . 8

<u>Still Births.</u>	Total	Male	Female.
Legitimate	7	5	2
Illegitimate	1	0	1
	<hr/> 8	<hr/> 5	<hr/> 3

Still Birth Rate per 1,000 Live and Still Births - 28 . 1.

<u>Deaths.</u>	Total	Male	Female.
	273	133	140

Death Rate per 1,000 of the estimated population - 13 . 9.

INFANT MORTALITY.

Deaths of Infants under 1 year: -

	Total	Male	Female.
Legitimate	7	7	0
Illegitimate	1	0	1
	<hr/> 8	<hr/> 7	<hr/> 1

Infant Mortality Rate: -

All infants per 1,000 Live Births	...	...	28 . 1
Legitimate infants per 1,000 legitimate live births	...	...	25 . 8
Illegitimate infants per 1,000 illegitimate live births	...	...	62 . 5



# BIRTHS, DEATHS AND INFANT MORTALITY FOR SIX YEARS.

		<u>1945</u>	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>
Birth Rate	...	14.1	16.8	18.6	17.0	15.3	14.8
Death Rate (all causes)	...	12.8	13.8	12.3	11.1	12.7	13.9
Deaths under one year (all causes per 1,000 live births).	...	26.8	28.5	31.4	24.3	30.5	28.1

## TABLE SHOWING CERTAIN VITAL STATISTICS AS COMPARED WITH OTHER AREAS IN ENGLAND AND WALES.

	England and Wales.	126 County Boroughs & Great Towns including London.	148 Smaller Towns - Resident Population 25,000 - 50,000	London Adminis- trative County.	Bakewell Rural District.
Live Birth Rate (per 1,000 Popln.)	15.8	17.6	16.7	17.8	14.8
Death Rate (per 1,000 Popln.)	11.6	12.3	11.6	11.8	13.9
Infant Mortality (Deaths under 1 year per 1,000 live births)	29.8	33.8	29.4	26.3	28.1

It will be seen from the foregoing that, as in 1949, the birth rate shows a slight fall and the death rate a rise. The birth, death and infant mortality rates compare very favourably with those for England and Wales.

## SEWAGE WORKS.

Tideswell. Conditions here continue to be most unsatisfactory, pollution of the brook course being at all times most noticeable, especially during dry periods. Although everything possible has been done to expedite matters in beginning the new works, there is still likely to be considerable delay owing to difficulty in obtaining delivery of special pipes etc..

Hathersage. In its present form this works is incapable of producing a satisfactory effluent. A scheme for a new modern works is being prepared by the Council's Engineers.

Stoney Middleton. Conditions here are similar to those at Hathersage but not so markedly unsatisfactory as less sewage has to be dealt with and overloading is less.

Grindleford. This is the only modern works in the North District and the effluent, which is fairly good, would no doubt be better but for the frequent and heavy discharges of warm soapy water from the nearby laundry.

Curbar. This works is entirely inadequate and the effluent is most unsatisfactory

Taddington. The construction of new sewers and sewage disposal works has begun and most of the work has been completed by the Contractors.

Winstanley. There has been an improved effluent from these works but it could be better.

Great Longstone. Analyses of the effluent have proved to be satisfactory.





## SEWAGE WORKS (Continued).

Little Longstone. These works, consisting of settling tanks and lagoons, are obsolete but no major problems of nuisance have arisen.

Chelmorton. Samples taken from these works for analysis have been unsatisfactory and it has not been possible to effect satisfactory results. The works are now the subject of special investigation.

Eyam and Baslow. Owing to lack of proper facilities very unsatisfactory and insanitary conditions exist here. It is most desirable that some consideration be given to the possibility of taking at least preliminary steps towards the provision of adequate sewage schemes in these villages.

General. There are still many parishes without proper sewage disposal schemes. Among those are Calver, Froggatt, Great Hucklow, Little Hucklow, Wardlow and portions of Litton and Calver. In Bradwell, where conditions are particularly bad, steps have been taken to provide a new and up to date system.

In the district as a whole, the position regarding sewage disposal is not good and, in my opinion, it is a matter of urgency to take steps to remedy this especially since the provision of a comprehensive water supply will make for better conditions of sewage disposal.

## HOUSING.

The number of houses completed by the Council during the year was 26 and the number by private builders 11, this shows a decrease of 12 Council houses from the previous year and an increase of 3 houses built privately.

The number of applications received by the Council for licences for permission to erect private dwelling houses has steadily increased whilst the number of licences permitted by the Ministry of Health to be issued remains the same. Many people have made preliminary enquiries but on learning the position have not proceeded further.

During the year the Housing Act, 1949, came into effect and it is possible for a person under this Act to apply for a grant towards the cost (within the limits of not less than £100 and not exceeding £600) of improving the property to the standard laid down in the Ministry of Health's Appendix to the Act. Although enquiries were received and applications were submitted in principle, nobody took advantage of the grant.

The Council have endeavoured to continue the improvement of existing dwellings by issuing licences for additions, alterations and renovations, and in some small measure they have succeeded. It is regrettable that very many people have to continue to live in dwellings which would have been either the subject of a demolition order, or have been included in clearance areas, as it has not been possible to provide alternative accommodation. The immediate prospect of being able to rehouse these families is very remote.

## WATER SUPPLIES.

As in previous years spring flows on many of the 24 schemes began to show signs of deterioration towards the end of May. Auxilliary pumping commenced from both Froggatt and Magclough sources during June to augment the Stoke Flat scheme, and in the latter case, Bradwell.

During the summer and early autumn, Bradwell was wholly dependant on supplies pumped from the Magclough springs and distributed via Eyam reservoir through the new 9" and 4" mains, the laying of which was completed in the previous year. As a result of this operation supplies were maintained, pumping being discontinued towards the end of October.





### WATER SUPPLIES (Continued).

Intermittent supplies were experienced in the parishes of Chelmorton, Taddington, Hathersage and Over Haddon during the summer months. Turning off during night hours became necessary to enable satisfactory distribution to be carried out to consumers. In the case of Over Haddon the shortage of supplies were attributed to the deterioration in the level of the river from which this supply is obtained.

Several improvements were carried out on distribution, main relaying etc., the reservoirs serving Crossbrook were covered with reinforced concrete and a submersible pump installed on the Flagg and Monyash Scheme.

The total number of supplies connected during the year was 41 and these were made up as follows:-

Domestic only	-	22;	Agricultural	-	12;
Trade	-	5;	Council Housing Sites	-	4.

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### INFECTIOUS DISEASES.

#### CASES NOTIFIED DURING THE YEAR 1950.

					<u>No. of cases.</u>		
					<u>Notified.</u>	<u>Removed to Hospital.</u>	
Tuberculosis - Pulmonary					9	...	5
- Other Forms					7	...	-
Smallpox: -							
Number vaccinated and re-vaccinated					-	...	-
Number vaccinated in infancy					...	...	-
Number unvaccinated					-	...	-
Scarlet Fever					18	...	4
Diphtheria					-	...	-
Enteric Fever: -							
Typhoid					-	...	-
Para-typhoid					1	...	1
Puerperal Pyrexia					-	...	-
Cerebro-spinal Fever					-	...	-
Erysipelas					4	...	-
Ophthalmia Neonatorum					-	...	-
Encephalitis Lethargica					-	...	-
Acute Polio-Myelitis					1	...	-
Pneumonia					24	...	-
Measles					113	...	-
Whooping Cough					86	...	-
Other Diseases: -							
Dysentery					2	...	1



CASES OF NOTIFIABLE DISEASES AT VARYING AGES DURING THE YEAR 1950.

Disease	0-1	1-	2-	3-	4-	5-	16-	15-	20-	35-	45-	60-	Total.
Smallpox ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever ...	1	1	-	3	-	8	3	2	-	-	-	-	18
Diphtheria ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Enteric Fever:-													
Typhoid ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Para-Typhoid ...	-	-	-	-	-	1	-	-	-	-	-	-	1
Puerperal Pyrexia	-	-	-	-	-	-	-	-	-	-	-	-	-
Pneumonia ... ..	-	1	-	2	1	3	1	1	4	3	3	5	24
Whooping Cough ...	5	7	9	9	10	46	-	-	-	-	-	-	86
Measles ... ..	5	9	8	14	15	53	6	-	1	-	2	-	113
Dysentery ... ..	-	-	-	-	-	-	-	-	1	-	-	1	2
Erysipelas ... ..	-	-	-	-	-	-	-	-	-	1	3	-	4
Tuberculosis ... ..	-	-	-	-	1	1	3	-	5	2	1	3	16

TUBERCULOSIS.

NEW CASES AND MORTALITY DURING THE YEAR 1950.

<u>NEW CASES.</u>						<u>MORTALITY.</u>			
<u>Age Group.</u>		<u>Respiratory.</u>		<u>Non Respiratory.</u>		<u>Respiratory.</u>		<u>Non Respiratory.</u>	
		M.	F.	M.	F.	M.	F.	M.	F.
0-	...	-	-	-	-	-	-	-	-
1-	...	-	-	1	-	-	-	-	-
5-	...	1	-	2	1	-	-	-	-
15-	...	-	-	-	-	-	-	-	-
25-	...	5	-	-	-	1	-	-	-
35-	...	1	-	1	-	2	-	-	-
45-	...	-	-	-	-	-	-	-	-
55-	...	1	-	-	-	-	-	-	-
65-	...	-	1	2	-	-	1	-	-
TOTALS		8	1	6	1	3	1	-	-

There was a satisfactory and gratifying reduction in the number of cases of Pulmonary Tuberculosis while the number of other forms of Tuberculosis notified remained about the same. There was a marked increase in the number of cases of Whooping Cough, but this was only part of an increase affecting the whole country.



FACTORIES ACTS 1937 and 1948.

INSPECTIONS OF FACTORIES - 1950.

<u>Premises.</u>	<u>Number on</u> <u>Register.</u>	<u>Number Of:-</u>	
		<u>Inspections.</u>	<u>Written</u> <u>Notices.</u>
(1) Factories in which sections 1, 2, 3, 4 and 6 are enforced by the Local Authority.	6	9	-
(2) Factories not included in (1) in which Section 7 is enforced by the Local Authority	57	31	2
(3) Other premises in which Section 7 is enforced by the Local Authority.	-	-	-
 TOTALS      ...      ...	 63	 39	 2

There were no prosecutions.

CASES IN WHICH DEFECTS WERE FOUND:-

Number of cases in which defects were found.

	Found.	Remedied.	Referred	
			To H. M. Inspector.	By H. M. Inspector.
Want of cleanliness (S.1) . . .	3	3	-	-
Overcrowding (S. 2), . . .	-	-	-	-
Unreasonable temperature (S.3)	-	-	-	-
Inadequate ventilation (S.4)	-	-	-	-
Ineffective drainage of floors (S. 6) . . . . .	-	-	-	-
<u>Sanitary Conveniences (S.7):-</u>				
(a) Insufficient . . .	1	1	-	-
(b) Unsuitable or defective	1	1	-	-
(c) Not separate for the sexes -	-	-	-	-
Other Offences against the Act ( not including offences relating to Outwork) . . . . .	3	3	-	-
 TOTALS      ...      ...	 8	 8	 -	 -

There were no prosecutions.





Description.	Cattle.	Sheep.	Calves.	Figs.
Number Inspected.	1380	3003	96	67

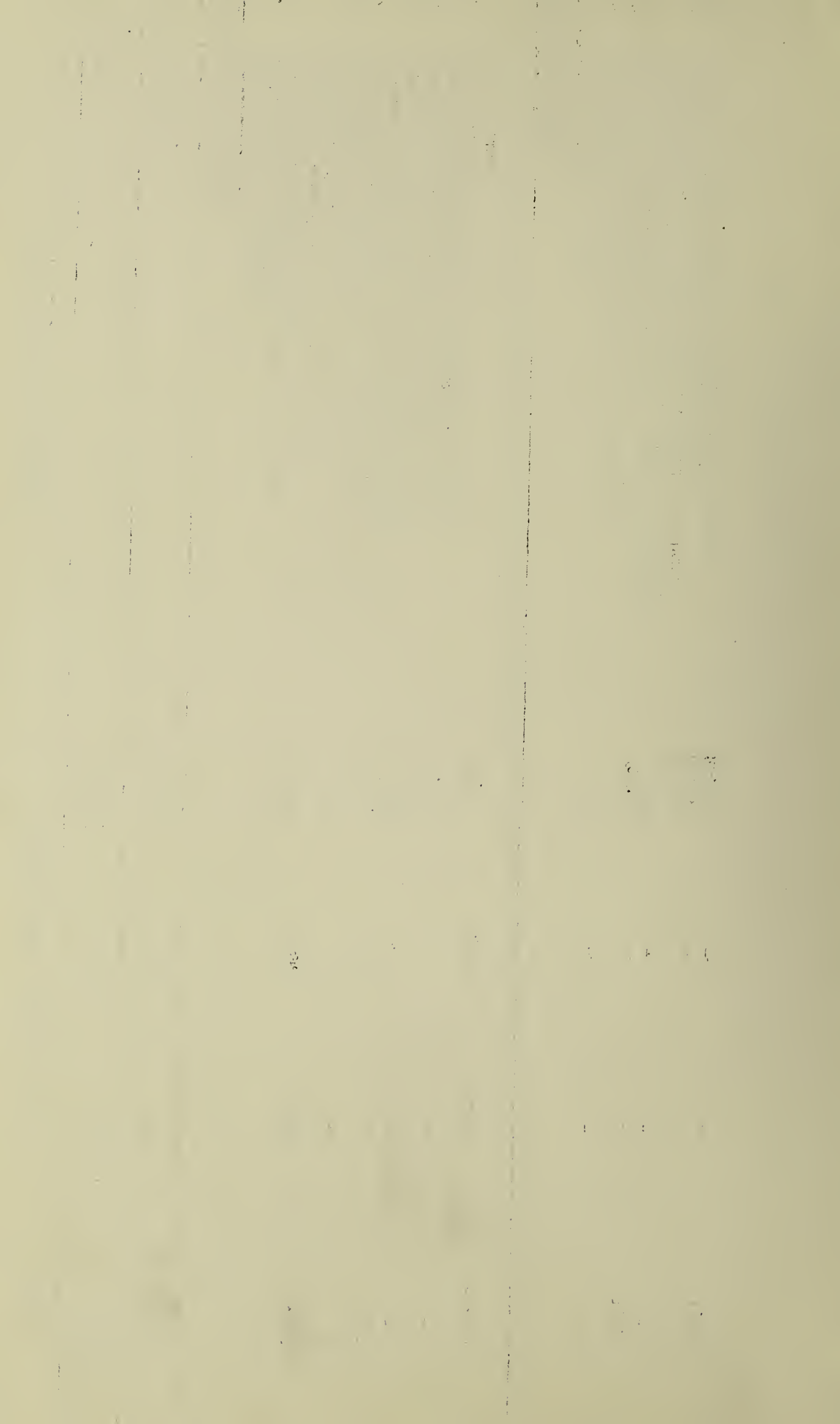
All diseases except T.B.

A.	Whole carcasses condemned.	4	8	4	3
B.	Percentage No. inspected affected, involving condemnation of whole carcass.	0.290	0.255	4.166	4.477
C.	Carcass of which some part or whole organ condemned.	410	18	-	5
D.	Percentage No. inspected, affected, but only involving condemnation of part of carcass or whole organ.	29.716	0.599	-	7.463
E.	Carcass of which only a part organ was condemned.	200	-	-	-
F.	Percentage No. inspected affected, but involving only condemnation of part of an organ.	14.493	-	-	-
G.	Percentage No. inspected affected in any degree (Not including E above).	30.00	0.865	4.166	11.940.

(5)

Tuberculosis Only.

A.	Whole carcass condemned	11	-	-	1
B.	Percentage No. inspected affected and involving condemnation of whole carcass.	C.797	-	-	1.493
C.	Carcasses of which some part or whole organ was condemned.	338	-	-	-
D.	Percentage No. inspected affected, but only involving condemnation of some part or whole organ.	24.493	-	-	-
E.	Percentage of No. inspected affected in any degree.	25.290	-	-	1.493.



NUMBER OF CATTLE INSPECTED AND CONDEMNED DURING THE PAST SEVEN YEARS.

	<u>1944.</u>	<u>1945.</u>	<u>1946.</u>	<u>1947.</u>	<u>1948.</u>	<u>1949.</u>	<u>1950.</u>
No. of cattle inspected : -	2373	3054	2696	888*	937*	1095*	1380*
Percentage of the number inspected affected with disease other than T. B. : -	22.90	22.45	38.47	31.42	38.74	48.58	44.49
Percentage of the number inspected affected with T.B. :-	28.20	30.90	30.37	37.05	35.00	28.31	25.29

NOTE:- \* These figures refer only to the Bakewell Rural Area and not to the three Districts previously included.

The Annual Report of the two Sanitary Inspectors is appended.

I remain,

Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

HUGH G. WATSON.

14th November, 1951.

Medical Officer of Health.



ANNUAL REPORT OF THE SANITARY INSPECTORS FOR THE YEAR 1950.

BAKEWELL RURAL DISTRICT.

Names of Inspectors:- NORTH - R.E.R. DAVIES. SOUTH - T.M. KILYON.

Estimated Population:- 19,580. Estimate No. of Houses :- 5,955.

GENERAL SANITARY ADMINISTRATION.

	<u>No. on Register.</u>	<u>Inspections Made.</u>
Bakehouses . . . . .	15	24
Dairies . . . . .	11	40
Factories and Workplaces . . . . .	110	121
Ice Cream Premises . . . . .	66	123
Milk Distributors . . . . .	13	44
Moveable Dwellings (a) Sites . . . . .	15	25
(b) Dwellings . . . . .	44	44
Offensive Trades . . . . .	1	2
Outworkers . . . . .	2	3
Preserved Food Stores . . . . .	13	26
Shops . . . . .	265	73
Slaughterhouses . . . . .	25	127

<u>SAMPLING</u> (Water Samples Only)	<u>No. taken.</u>	<u>Results.</u>
		<u>Sat.</u> <u>Unsat.</u>
<u>WATER</u> Mains . . . . .	53	24 29

<u>WATER SUPPLIES.</u>		<u>Estimated</u> <u>Popln. Involved.</u>
No. of houses in District connected to mains . . .	5202	17,126
No. of houses in District supplied from standpipes on mains . . . . .	240	801
No. of houses in District not supplied from standpipes or mains . . . . .	513	1,652
No of connections made during the year:-		
(a) existing houses . . . . .	28	112
(b) new houses . . . . .	28	
(c) other premises . . . . .	29	

<u>DRAINAGE:</u>		<u>Estimated</u> <u>Popln. Involved.</u>
No. of houses in District connected to sewers . . .	3,300	9,886
No. of houses in District not connected to sewers .	2,655	9,694
No. of connections made during the year:-		
(a) existing houses . . . . .	5	20
(b) new houses . . . . .	14	
(c) other premises . . . . .	7	
No. of conversions of other closets to W.C.s . . .	78	

HOUSING.

New houses erected during year by:-	
(a) Local Authority . . . . .	14
(b) Private Enterprise . . . . .	9
No. of dwelling houses inspected for housing defects (under Public Health or Housing Acts) . . .	54
No. of dwelling houses found not to be in all respects reasonably fit for human habitation . . . . .	52
No. of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation . . . . .	2
No. of defective dwelling houses rendered fit in consequence of action (formal or informal) by the Local Authority . . . . .	52

Signed R.E. RONALD DAVIES, T.M. KILYON.

9th August, 1951.

